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ADAPTIVE DATA RATE CONTROL FOR MOBILE DATA TRANSFER ABSTRACT OF THE DISCLOSURE

A method and system applicable within a mobile transmission system for adaptively allocating a downlink data rate to an access terminal to compensate for channel fading. In accordance with the method of the present invention a downlink data rate selected in accordance with a determined signal-to-noise level, wherein the downlink data rate is associated with a specified signal-to-noise threshold to achieve a specified packet error rate. Next, a packet is transmitted to an access terminal at the selected downlink data rate. In response to successfully decoding the packet at the access terminal, the signal-to-noise threshold specified for the selected downlink data rate is decreased such that subsequent data rate selections are adaptively maximized. Responsive to a packet decoding error, the signal-to-noise threshold is abruptly increased to maintain the specified packet error rate.